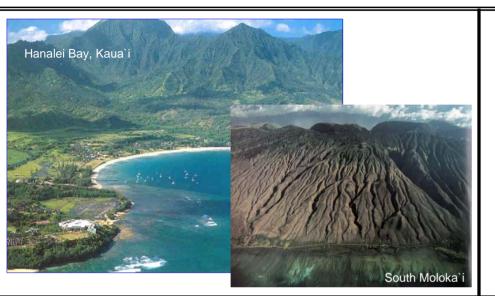


ZUSGS Ridge-to-Reef Assessment of Land-based Pollution Impacts on Nearshore Pacific Coral Reefs

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Objectives

- Quantify terragenic sediments on reefs in multiple locations on high islands
- Evaluate watershed ecosystems for sediment sources, transport, and causes
- Develop sedimentation model that links terrestrial and marine ecosystems with resource management options

Accomplishments

- Measured magnitude and residency patterns of sediments on reefs
- Acquired and evaluated > 8,000 aerial images of watersheds and reefs
- Determined daily discharge of fresh water and sediment to coastal waters
- Initiated studies of sediment and algal impacts on coral physiology and changes in marine communities over time

Significance

- Multidisciplinary support to DOI leadership on U.S. Coral Reef Task Force land-based pollution objectives
- Active participation of resource managers and community stakeholders in shaping objectives and metrics
- Knowledge, methods, and technology can be applied to other DOI objectives

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